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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/867,872 | 05/30/2001 | Masami Tabata | 1232-4719 | 9001 |
| 27123 | 7590 | 10/05/2004 | EXAMINER | |
| MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101 | | | SAFAIPOUR, HOUSHANG | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2622 | |

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/867,872 | Applicant(s) TABATA, MASAMI | |
| | Examiner Houshang Safaipoor | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/23/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's amendment filed on July 8, 2004, has been entered and made of record.

Claim 12 has been amended therefore, rejection of claims 12 and 13 under 35 USC § 112 is withdrawn.

In view of the amendment, applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (U.S. Patent No. 5,969,343) and further in view of Lin et al. (U.S. Patent No. 6,464,366).

Regarding claim 1, Nakamura et al. discloses an illumination device which comprises a light source and a light guide member having an entrance surface for receiving light coming from the light source, an exit surface for outputting light in an illumination direction, and a first diffusion region for reflecting and/or diffusing an incoming light beam across a longitudinal direction (col. 14, lines 17-35). Nakamura et al. does not explicitly disclose a second diffusion region inserted in an optical path of light between the light source and the entrance surface. Lin et al. discloses such an illumination device (fig. 1A, light homogenizing 20, col. 5, line 53 through col. 6, line 27). Therefore, it would have been obvious to a person of an ordinary skill in

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the art at the time the invention was made to combine the illumination device of Lin with that of Nakamura to improve illumination uniformity.

Regarding claim 2, Nakamura et al. discloses the device according to claim 1, wherein said device comprises a plurality of light sources, and said diffusion means is common to light beams coming from the plurality of light beams (col. 22, lines 32-67).

Regarding claim 3, Nakamura et al. discloses the device according to claim 1 wherein said diffusion means comprises a light diffusion surface formed on the entrance surface (col. 3, lines 7-17).

Regarding claim 4, Nakamura et al. discloses the device according to claim 1, wherein said diffusion means comprises a three-dimensionally patterned surface formed on the entrance surface (col. 3, lines 45-57).

Regarding claim 5, Nakamura et al. discloses the device according to claim 1, wherein said diffusion means comprises a three-dimensionally patterned surface formed on a surface of a resin which covers the light source (col. 15, line 51 through col. 16, line 6).

Regarding claim 6, arguments analogous to those presented for claim 5 are applicable to claim 6.

~~Regarding claim 7, Nakamura et al. discloses the device according to claim 2, wherein~~
the plurality of light sources are integrally packaged (col. 22, lines 32-66).

Regarding claim 8, Nakamura et al. discloses the device according to claim 2, wherein the plurality of light sources comprise LEDs (col. 22, lines 32-66).

Regarding claim 9, Nakamura et al. discloses the device according to claim 8, wherein the plurality of LEDs have different emission wavelengths (col. 22, lines 32-66).

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Regarding claim 10, Nakamura et al. discloses the device according to claim 9, wherein the plurality of LEDs respectively have red, green, and blue emission wavelengths (col. 22, lines 32-66).

Regarding claim 11, Nakamura et al. discloses an image sensor comprising an illumination device cited in claim 1, a lens for imaging optical information at a read position, and a photoelectric conversion element for receiving an optical image formed by said lens, and converting the optical image into an electrical signal (fig. 28).

Regarding claims 12 and 13 arguments analogous to those presented for claim 11 are applicable to claims 12 and 13.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

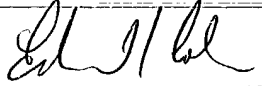
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipour whose telephone number is (703)306-4037. The examiner can normally be reached on Mon.-Thurs. from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles, Sr. can be reached on (703)305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Houshang Safaipour
Patent Examiner
Art Unit 2622
September 24, 2004



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SUPERVISORY PATENT EXAMINER
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